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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,019	04/07/2004	Nam T. Chao	101896-0245	3018
21125 7590 08/24/2007 NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			EXAMINER REIMERS, ANNETTE R	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 08/24/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No. **10/709,019**Applicant(s)  
**CHAO ET AL.**Examiner  
**Annette R. Reimers**Art Unit  
**3733**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 39 is/are pending in the application.
- 4a) Of the above claim(s) 7, 14, 30 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11, 13, 15-29, 31-34, 36, 37 and 39 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 and 20 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-11, 13, 15-29, 31-34, 36-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (FR 2,816,195), previously cited by applicant, in view of Burgess et al. (US Patent Publication Number 20030114853), previously cited by examiner.

Taylor et al. disclose an implantable spinal cross-connector, 1, comprising first and second matable central portions, e.g. at 7-10, (see figure 1), wherein at least one of the first and second central portions includes at least one connector, 2, member is formed on the terminal end thereof, the at least one connector member having first and second opposed jaws, 25, adapted to seat a spinal rod therebetween, wherein at least one of the jaws is selectively movable between a first, open position wherein the first and second jaws are positioned a distance apart from one another and a second closed position wherein the first and second jaws are adapted to engage a spinal fixation element therebetween, and at least one of the jaws is capable of being unitary with the central portion and a locking mechanism, 3, having a shank that is receivable within a non-expandable bore, formed in the connector member, the locking mechanism being

adapted to come into contact with each of the first and second jaws to selectively lock at least one of the first and second jaws in a fixed position (see figure 1)

The locking mechanism includes a non-eccentric head, 3a, formed on a proximal end of the shaft and a threaded portion that is effective to mate with the threaded portion of the bore formed in the second jaw (see figure 1). The non-expandable bore formed in the at least one connector member includes an enlarged proximal opening that is adapted to seat a non-eccentric head of the locking mechanism, wherein the non-expandable bore includes a non-threaded portion, 27, formed in the first jaw and a threaded portion, 28, formed in the second jaw, and wherein the shank of the locking mechanism includes a non-threaded proximal portion that is adapted to sit within the non-threaded portion of the non-expandable bore formed in the first jaw and a threaded distal portion that is effective to mate with the threaded portion of the non-expandable bore formed in the second jaw (see figure 1). The second jaw on the at least one connector member is pivotally mated to the first jaw, and wherein the non-eccentric head of the locking mechanism is effective to move the second jaw from the open position to the closed position when the head is disposed within the enlarged proximal opening of the non-expandable bore (see figure 1). In addition, the locking mechanism is adapted to pull the first and second jaws toward one another into the second closed position when the locking mechanism is advanced into the non-expandable bore (see figure 1). The first and second jaws define a substantially C-shaped recess therebetween (see figure 1). The first and second jaws include a slot, 21b, found

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therebetween and adapted to allow movement of the first and second jaws between the first open position and the second closed position (see figure 1).

The first and second central portions comprise substantially elongate members, wherein the first and second central portions are formed from first and second transverse members, 6 and 5, that are slidably matable to one another (see figure 1). The first transverse member, 6, includes a female mating element and the second transverse member, 5, includes a male mating element that is adapted to be received by the female mating element (see figure 1). A central locking mechanism, 13, for locking the first and second transverse members at a fixed position with respect to one another. In addition, the first and second transverse members are angularly adjustable with respect to one another along the longitudinal axis of the spinal cross-connector and are capable of being positioned at an angle of about 20° with respect to the longitudinal axis of the spinal cross-connector (see figure 1).

The central portion includes first and second transverse members that are connected to one another by a central clamp, 12, that allows angular adjustment of the first and second transverse members with respect to one another along a longitudinal axis of the spinal cross-connector (see figure 1). In addition, the central locking mechanism is formed in the central clamp for locking the first and second transverse members in a fixed position with respect to one another (see figure 1).

The central locking mechanism extends through the central clamp and each of the first and second transverse members is adapted to engage and close the central clamp, thereby locking the first and second transverse members therebetween (see

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figure 1). The at least one connector member includes a bend zone, 21b, formed between the connector member and the central portion to allow angular movement of the connector member with respect to the central portion (see figure 1).

Regarding claim 33, Taylor et al. disclose the claimed invention except for the clamping surface of the jaw members comprising a series of ridges device. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the device of Taylor et al. with the clamping surface of the jaw members comprising a series of ridges device, since applicant has not disclosed that the clamping surface of the jaw members comprising a series of ridges solves any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a more secure form of screwing an object into a hole and for clamping an object. In re Dailey and Eilers, 149 USPQ 47 (1966). In addition, it appears that the invention would perform equally well with the clamping surface of the jaw members not comprising a series of ridges device

Taylor et al. disclose the claimed invention except at least one jaw being unitary with the central portion. It is noted that the Taylor et al. device comprises several parts, i.e. a jaw and a central portion, which are rigidly secured together as a single unit, via the locking mechanism, 3 (see figure 1). Therefore, the constituent parts are so combined as to constitute a unitary whole or structure. In re Larson, 144 USPQ 347 (CCPA 1965). Furthermore, permanently affixing, e.g. via molding, jaw 2 to the central portion would not destroy the function of the opposing members of the jaw or the effect



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that the locking mechanism, 3, would have on the opposing members of the jaw or the slot.

Taylor et al. disclose the claimed invention except for the first and second central portions being longitudinally slidably matable to one another. Burgess et al. disclose a spinal cross-connector comprising first and second central portions, e.g. 68 and 70, respectively, wherein the first and second central portions are longitudinally slidably matable to one another and teach the use of such an arrangement to alter the length of linkage (see figure 5 and paragraphs 007 and 0034). It would have been obvious to one skilled in the art at the time the invention was made to construct the spinal cross-connector of Taylor et al. with the first and second central portions being longitudinally slidably matable to one another, in view of Burgess et al., to alter the length of linkage.

With regard to the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Taylor et al., which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

#### ***Allowable Subject Matter***

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claims 1-6, 8-11, 13, 15-29, 31-34, 36-37 and 39 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR

  
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